Development of HAP Source Category List

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Statute

- Type of Program
  - New source review: applies to new sources and modifications to existing sources
  - Control technology: new sources and modifications subject to:
    - Maximum Achievable Control Technology (MACT); or
    - Hazardous Air Pollutant Reasonable Available Control Technology (HAPRACT)
  - Control technology may be avoided through Risk Management Analysis (RMA)

Statute

- Sources Subject to Program
  - All major sources of HAP;
    - Defined as sources with potential to emit (PTE):
      - 10 tons per year (TPY) of a single HAP
      - 25 TPY of any combination of HAP
    - Subject to MACT

Statute

- Sources Subject to Program (cont'd)
  - Non-major sources
    - With PTE of
      - 1 TPY of a single HAP
      - 2.5 TPY of a combination of HAP
    - But only if the source belongs to a category listed pursuant to section 49-426.05
    - Subject to HAPRACT

Statute

- Source category Listing Criteria under 49-426.05: HAP emissions "from sources in the category individually or in the aggregate result in adverse effects to human health or adverse environmental effects."

Methodology

- Step 1
  - Identify ambient air concentrations (AAC) at which adverse effects to human health will result from HAP emitted by candidate sources
  - Addressed by 2 Weston documents:
    - Development of Acute Health-Based Ambient Air Criteria
    - Development of Chronic Ambient Air Concentration (Long-Term)
  - Subject of July 19 Stakeholder Meeting

Methodology

- Step 2
  - Model HAP emissions from sources in the candidate categories to determine ambient concentrations
  - Modeling approach addressed in Weston document "Procedure for Air Quality Dispersion Modeling for the Arizona HAPRACT Rule"; subject of August 10 Stakeholder Meeting
  - Results presented in spreadsheets made available before today's meeting

Methodology

- Step 3
  - Compare modeled concentration to AAC
    - If modeled concentration of any HAP from any source in category > 120% of AAC, list category
    - If highest modeled concentration < 80% of AAC, do not list
    - If highest modeled concentration between 80% and 120% of AAC, conduct further evaluation
  - Comparison also included in spreadsheets